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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,581	04/12/2004	Robert Burgmeier	S63.2-10865-US01	2645

490 7590 03/17/2008

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EXAMINER	
TRAN, THAO T	
ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
03/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,581	BURGMEIER ET AL.	
	Examiner	Art Unit	
	Thao T. Tran	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,10,11 and 45-63* is/are pending in the application.

4a) Of the above claim(s) *45-63* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 10-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the Amendments filed on 12/13/2007.

2. Claims 1-7, 10-11, and 45-63 are currently pending in this application. Claims 1 and 10 have been amended. Claims 8-9, 12-13, and 39-44 have been canceled. Claims 45-63 have been newly added.

3. In view of the prior Office action, the prior art rejection of claims 1-7 and 10-11 is maintained as set forth below.

Election/Restrictions

4. Newly submitted claims 45-63 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 45-63 are directed to a medical device tubing whereas the originally presented claims are directed to an article or a laminate.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 45-63 are hereby withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-7 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (US Pat. 5,195,969), Samuelson et al. (US Pat. 6,464,683), or Boer et al. (US Pat. 6,355,358) in view of Shimura et al. (US Pat. 5,441,488). Boer is cited by Applicants in the IDS of 9/16/2005.

Wang teaches a laminate in a medical balloon or a catheter, the laminate comprising an innermost layer of polyethylene, an outermost layer of Nylon (polyamide), and a layer of Plexar sandwiched in between. Plexar is an anhydride-modified polyolefin. (See Figs 3-4; col. 4, ln. 14-15, 46-49).

Samuelson teaches a laminate in a medical tubing, the laminate comprising an outer layer 16, a core layer 12, and an intermediate tie layer 14 interposed between the outer layer and the core layer (see abstract; Fig. 1). The outer layer comprises a polyester or polyamide; the core layer comprises a polyethylene; and the intermediate tie layer comprises a polymeric material comprising functionality capable of adhering outer layer 16 to core layer 12. (See col. 6, ln. 5-6, 41-45, 57-59). The polymer of the intermediate tie layer comprises modified olefinic polymer having an anhydric moiety or maleic acid (see col. 7, ln. 12-51).

However, neither Wand nor Samuelson teaches the amount of the modifying compound of the polyolefin or a catalyst in the intermediate layer.

Boer discloses an article comprising a thermoplastic multilayer composite. The multilayer composite has at least one layer I, at least one layer II, and an adhesion promoter (tie layer) disposed in between layer I and layer II (see abstract).

Boer further discloses that layer I comprises a polyamide molding composition. Layer II comprises a polyester molding composition (see col. 6, ln. 1-2). The adhesion promoter

comprises at least 5% by weight of a graft copolymer prepared from the following monomers: (a) a polyamine and (b) polyamide-forming monomers selected from lactams, aminocarboxylic acid, and/or equimolar combinations of diamine and dicarboxylic acid (see paragraph bridging col. 2-3), and 0.01-4.2 mol of an oligocarboxylic acid (see col. 4, ln. 8-13), which appears to meet the requirement of the coupling agent in the presently claimed invention.

The adhesion promoter layer in the invention of Boer further comprises polyamide and polyester (see paragraph bridging col. 7-8). The polymer composition in the adhesion promoter layer is crosslinked and a melt (see col. 5, ln. 22-44).

With respect to how the polymer is crosslinked, it has been within the skill in the art that how crosslinking of the polymer occurs would have no significant patentable weight.

The polyamide composition in layer I further contains up to 40% by weight of ethylene-propylene copolymers or aliphatic olefin copolymers (see col. 6, ln. 39-48).

Boer does not teach the use of an acid anhydride-modified polyolefin or a catalyst.

Shimura teaches a modified polyolefin as an adhesive in a laminate, the modified polyolefin comprising maleic anhydride is deposited on polyolefin or polyamide (see col. 4, ln. 51-56; col. 5, ln. 1-7). The content of acid anhydride is 0.5-50% (see col. 5, ln. 9-10). The composition further comprises a catalyst, such as tertiary amine, to promote the reaction of the acid anhydride (see col. 5, ln. 40-43).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the modified polyolefin with the acid anhydride content and the catalyst, as taught by Shimura, in the tie layer of Wang, Samuelson, or Boer, for the purpose of enhancing adhesion between the tie layer and the outer and inner layer. This is

because Shimura teaches that the use of such modified polyolefin and catalyst would have improved bonding and crosslinking between the modified polyolefin and polyamide or polyester.

It is noted that in the prior art section of Boer, a catalyst is used in the adhesion promoter layer. Thus, it would have been obvious to one of ordinary skill in the art to have employed a catalyst in the adhesion promoter layer of Boer for the purpose of enhancing the efficacy of polymerization of the copolymer in the layer.

Response to Arguments

7. Applicants' arguments with respect to claims 45-63 are moot due to the withdrawal of the claims.

8. Applicant's arguments filed on 12/13/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Wang and Samuelson disclose an anhydride-modified polyolefin in an intermediate layer. Boer does not teach the use of an acid anhydride-modified polyolefin or a catalyst.

Shimura is used to illustrate that the use of a modified polyolefin comprising an acid anhydride in the recited range has been taught in the prior art, for the purpose of enhancing bonding and crosslinking between the layers. Thus, Shimura is used to remedy Wang, Samuelson, and Boer.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thao T. Tran/
Primary Examiner, Art Unit 1794

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